PCT

RAW SEQUENCE LISTING   DATE: 07/29/2004
PATENT APPLICATION: US/10/502,332   TIME: 16:05:49

Input Set : **A:\PTO.FG.txt**
Output Set: **N:\CRF4\07292004\J502332.raw**

```
    5 <110> APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
    9 <120> TITLE OF INVENTION: Mutated gene coding for a LAT protein and the biological
applications
   10       thereof.
   13 <130> FILE REFERENCE: B0184PCT
C--> 17 <140> CURRENT APPLICATION NUMBER: US/10/502,332
C--> 19 <141> CURRENT FILING DATE: 2004-07-23
   23 <150> PRIOR APPLICATION NUMBER: US60/356.136
   25 <151> PRIOR FILING DATE: 2002-02-14
   27 <150> PRIOR APPLICATION NUMBER: EP02/290610.1
   29 <151> PRIOR FILING DATE: 2002-03-11
   33 <160> NUMBER OF SEQ ID NOS: 9
   37 <170> SOFTWARE: PatentIn version 3.1
   41 <210> SEQ ID NO: 1
   43 <211> LENGTH: 6307
   45 <212> TYPE: DNA
   47 <213> ORGANISM: Mus musculus
   51 <400> SEQUENCE: 1
   52 tatccatagt cccagactta acaggggctg tcaggtcacc ctgtgggtaa gtccctgtct      60
   54 tctgagcttg gtaatctaga aggagggctg ctcttttctg agtgagctgg ttcagtatga     120
   56 ctgtgactca ccgtggtccc ctggaagtcg ctctcccagt agttaagcct gggagctggg     180
   58 ggcctgtggt gccctcagtg ccctcggtcc acacaggcct tggcagagcc tccttccagt     240
   60 tctcccaccc gggcatgggg agggtaccgc gggcctggtt ggcacgtgtc tcctttccta     300
   62 gtggacgggc tgcctcatcc tgcagcctta gacccttcct ccacacagtc cctctgcctc     360
   64 ctcccccttc ccacaactgg gtgggggtga gtgggcaggg ggcaggctca gcctgctgag     420
   66 cagcctgatg atttcctgcc ctcaccacag cttcctgtcg cacgcggtgg tgagcaggag     480
   68 aggcaggcgg ggagcaagaa aggggcaggt acagctgggc acggggatcg tgcagctggt     540
   70 agctgggggca cgggcccccag ctctggctct ggggcgagca cctttccaga gccaacactg     600
   72 ctctcaactc agtccagcaa gagaggggag ccatccagcc ccgaaaggat acggctgcct     660
   74 actgccgggc ggatcccagg ctggagcccg cttggtccca taccctgct gccactctgt     720
   76 ctcgaggggc tgcagtgcag cagggcctgt ggcaggtgct ctgcagatgg aagcagacgc     780
   78 cttgagcccg gtggggctgg gcctcctgct gctgcccttc ttggtcacgc tcctggctgc     840
   80 cctgtgcgtg cgctgccgtg agttgccagg taagtgggaa gctttgcgga actggatgat     900
   82 gggtgggcgc tccattggat cctcataccc tccccagccc ctgcactctc cactgtccct     960
   84 acctgggccc tgattgatgg tgggggggcct gagtttcttt gtccctggtg caccccgatc    1020
   86 ctgacttgtt ggatttcttt cctccagtct cctatgacag cacttccaca gagaggtgag    1080
   88 tgggaagccc gtgtccctgt gtgtcttccc ttggttccac tcaagggttt ggggctgggg    1140
   90 ccctcttggc cctgtaccca agctgtctct ttcctgccag tttgtaccca agaagcatcc    1200
   92 tcatcaagcc acctcgtgag ttcagtgtct ctggccctcc tcgagggttt ttaagagtgt    1260
   94 gcgtttgtcc ttgttcacct ttagctgtct gaagggctgt tccctggctt gggatgggga    1320
   96 aagtgggagc ccccatgtct gtctagggca tgttattttg gggtccattt gtccttcgag    1380
   98 gccttgatgg ggggtgtctg gagccatccc tcaagcttca ttctgtgtcc tcagaaataa    1440
  100 ccgtcccccg aacacctgct gtttcctacc ctctagtcac ttccttccca cccctgaggc    1500
  102 agccagacct gctccccatc ccgtgagtat cccccaattc cgtcccttgg gtctactgtg    1560
```

RAW SEQUENCE LISTING   DATE: 07/29/2004
PATENT APPLICATION: US/10/502,332   TIME: 16:05:49

Input Set : A:\PTO.FG.txt
Output Set: N:\CRF4\07292004\J502332.raw

```
104 cctctccacc ttctaggttg gggaggcgct ttttcctggt tgtcttgctc ccagagtcct 1620
106 acctagacgt aatctctgac ctttggcttc caggagatcc ccacagcccc ttgggggttc 1680
108 ccatcggatg ccatcttccc agcagaattc agatgatggt aagggtgtag ggcacaggag 1740
110 ggctttgggg aggatgtaca acctgagctg atccagtctt cttctccctc tctctttgaa 1800
112 gccaacagtg tggcaagcta cgagaaccag ggtgggtctg gggtctgggg tagtgggtgg 1860
114 ggtgggagg ctggacctgt ccaggtcgtg ttaactctcc tttctcacag agccagcctg 1920
116 taagaatgtg gatgcagatg aggatgaaga cgactatccc aacggcttcc tgtgagtggg 1980
118 tagaggagat ctgaccgtgg aagttgtgtg ccctttatca acttctcgtt ccttcctttc 2040
120 ttccagagtg gtgctgcctg acagtagtcc tgctgccgtc cctgttgtct cctctgctcc 2100
122 tgtgcctagc aaccctgacc ttggagacag tgccttctct ggtgagtcag gctttctgtc 2160
124 tacctccctc tgccatgtgc tgccagctct ccactcttgc ctccctctca cctccgtgac 2220
126 gattgccgcc cttccatttc ctcctgtaga cgttgggctt cctgctcctc atcacttccg 2280
128 actgtcttgt ttttccttcc acctttgctc cttcgtctct gttgtctaag aaatttcctg 2340
130 actctttttg aaccctgcca ttgaaatttc atttctcggc tgggtgtgag ggcctacgat 2400
132 cccagcatca ggaggcagtg gcaggagggt tgaatttgag gctagcctgg gctacatagt 2460
134 gataccctct cttcgaaaac caaaacagca cgacgatcaa caaaaagaaa acaaaagaat 2520
136 ttatttctct tatctgaaag tcccctccc cttttttggc gtctcggttc tttttgtata 2580
138 gtacactgtt gtttcttgga agcaatatca tctaatgtat ctataagaac tttgattaca 2640
140 tagccgggtg gtggtggcgc acgcctttaa ttccagcact cgggaggcag aggcaggcgg 2700
142 atttctgagt tcaaggccag cctggtctac agagtgagtt ccaggacagc caggactaca 2760
144 cagagaaacc ctgtctcgaa aaaacaaaac aaaacaaatt ttgattacag attgtttctc 2820
146 tctgtgtctc tatccctctc tggttctgcc cgtctctctg tatctctgcc cgtctctctg 2880
148 tatctctgcc cgtctctctg tatctctgcc cgtctctctg tatctctgcc cgtctctctg 2940
150 tatctctgcc cgtctctctg tatctatctc tgcccgtctc tctgtatctc tgcccgtctc 3000
152 tctgtatctc tgcccgtctc tctgtatctc tgcctgtctc tctcacacac actcactgaa 3060
154 gatttattct gcgtaccaca tggtcgttgt ttctcttggg ctgcttttct ctgctttggt 3120
156 ctttctcctt ccttgagctt ttctcaagtt ctggtgatct tcagttttct atcctcttat 3180
158 ctctgtatag catgagtatc ccttacctga aacacttcaa tacagatttg ggaatattta 3240
160 taaacatata ataaattctc ttggggatga aactcaagat aaaacatgta attaatttat 3300
162 tcatgtttta tacaaaccat atatgtaata tatacacagt ctgaagatag gttttgtttt 3360
164 tgtcttagtt ttattggcat agagcgtcat tgtatagtcc tggctgtcct ggaacttgat 3420
166 atctagacca ggtagactca aactcaaatt aaacgtgtag gttaccatgc tcggtcttta 3480
168 aggtagttct atgcaaattt taattaatct tttgtatgaa atagaagttt catgaaattt 3540
170 tccatttgtg gtatcgcacc agtatgaaaa ggttttggat ttcggaatat gatgaatttt 3600
172 ggagttttaa aaggaacacc caaccttctg tatttaccct agactattat gtctgtactc 3660
174 tggctctgtt ttgtttgaga gagaatctca ctgtagagtc ctggctgccc tggaactcac 3720
176 tttgtagatt aagtatggcc tttaactcca gttgcctctg gcttctgagt ctgggatta 3780
178 tatggggtta aagacgtatc cctcttgttc cacttggttt ttgttgttgg tggtttgttt 3840
180 atttagcttt ttttttttca gtttttctcc ctcaatacag ctttttctcta tgtatccttg 3900
182 gctgtcctag acctcactct gtagaccagg ctgtccttga actcagaaat ctgcctgcct 3960
184 ctacctcctg agtgctggga ttaaaggcac gtgccaccac cacctggctc tcttgctcca 4020
186 tttgtaaccc actgactata caatgagtcc ccatgtcaat aaaaccaaga caaaacaaaa 4080
188 acctagcttc agactgcgta tatatgattt atataaacca tgcatgactt aattccgtgt 4140
190 aatttgtcat ttctctcctg aaccccagac tgtttgagtg atcccttcct tccatccgtc 4200
192 ctggtctctc gctcctcatt tcctggttat gtctgctgac ttttgctagg gatttaggga 4260
194 gccaatgcag caaacttgta atggtaaaag gatcattgct aggggcaaaa tgactcattt 4320
196 taatttcagt gagagactct gtctcaaaga actatggtgg aatggctaaa gcctccatgt 4380
198 gctcctgagt gtgtgcagtg gcataacaca cagagaggta ctaagagaac tactgttaac 4440
200 tgaggagcaa ctctatgccc tcgtggtgtg tacagctcat tagacctcac agttcgtggg 4500
```

```
202 tgctctgctg accgtaccct cttcccctcc tgtccctcac atctctctct gtactgtctc   4560
204 tctgtatggt atgctagagt ttatttattt acttaaattg atacagtctt gctgttgtga   4620
206 tgtccagtct gtcttgagct caagttagcg cctgcctccc gtcttctgag accacagcct   4680
208 ggctcaaggt tgctagtaat tggaacaacg gtagcacata gtgtattgca ggctctgttt   4740
210 tacaatttat tgtttattcc tcactctagt ccttccaggc aggtcctgtt atgaacctca   4800
212 ttctacagac taggaaactg gggcagggag catttaggtg acttatctga ggttagatag   4860
214 ttgcttagtg ctgggactga ggtttgagcc agtgtatttg gctcagcttg tccacatgcc   4920
216 catacagaaa ccaggcaacc atgaaaccag aaagcaaaaa gctgtgtagc attgtgagtg   4980
218 acctttgtgg gcccaggaag gtgagggcaa gagctgataa cattgagaga ccaacaggtc   5040
220 tgagaagagg ggatgccaac tagaccaagt gtgccacttc ttcacagatc accaaggtct   5100
222 ctgcactctg agctccttgg agccctgctc tccagcctca ctgcctgagt cctgtattgt   5160
224 ctctgttcca ttcccccaga ggctctggtc ctggctctcc atccacctcc atggcccttg   5220
226 ccctgcccag gcttcttctc ccctcgcttt tcctgaatat tctctctata ttgtgagtct   5280
228 gcctgggggt tgtgttagga acttagatg tctgagccgg gggtgggagg tgtctctggg    5340
230 gaacagtgcc tggctgagtg tctgctaata actgtactgc aatggctatt ctacagtgga   5400
232 gtcgtgtgaa gattacgtga atgttcctga gagtgaggag agcgcagagg cgtctctggg   5460
234 taggtgactc tgcactccat gcatggccca tagcctctcc ctaccctctg catggcctgc   5520
236 ccttcacacc actgtccctg ctggtctgtc cccacagatg ggagccggga gtatgtgaat   5580
238 gtgtccccag agcagcagcc agtgaccagg gctgagctgg gtgagtacca aggtgtaagg   5640
240 gggcagaggc tggggagcag ccttgagtag agagtctgta ggctgaacgg cagtctccct   5700
242 ctgttttttcc ctctcagcct ctgtgaactc ccaggaggtg aagacgaag gagaagagga   5760
244 aggggtggat ggagaggaag ctcctgacta tgagaatctg caggagctta actgaaagcc   5820
246 tagtgagtgg tctctgtccc cgcccccacc ttgggccttc tctccaggac cccccctcctg   5880
248 cctatcccca gtggttaggc acattctttg tggctctgga tacccgggtg gcttcatgac   5940
250 tgtcctccct gtctcccctg ccctgctgtg tttcagctgc agctgtctgt cctgaaactg   6000
252 gacttgctgg ggtgtcgcta agaggatccc atttgacctc tgccttgcca cagcctgaga   6060
254 atcttcccct aacttattgt cactttgggg tccagtctgt gtccccaata ttctgtacct   6120
256 tctgataaag cctgagaatg aatctggttc cagccagacc atgtcatgga ataaaggcca   6180
258 tgtgacataa agtcgtcgtt gtcttctttt tgttgttgct ggtgttgttg gtttgtttgt   6240
260 ttgtttaact gggacagggt cttgctatgt tgatcaaggc tggtcttgaa cctgtgggtg   6300
262 atcatcc                                                             6307
266 <210> SEQ ID NO: 2
268 <211> LENGTH: 61
270 <212> TYPE: DNA
272 <213> ORGANISM: Mus musculus
276 <400> SEQUENCE: 2
277 agccagcctg taagaatgtg gatgcagatg aggatgaaga cgactatccc aacggcttcc     60
279 t                                                                     61
283 <210> SEQ ID NO: 3
285 <211> LENGTH: 20
287 <212> TYPE: PRT
289 <213> ORGANISM: Mus musculus
293 <400> SEQUENCE: 3
295 Pro Ala Cys Lys Asn Val Asp Ala Asp Glu Asp Glu Asp Asp Tyr Pro
296 1               5                   10                  15
299 Asn Gly Phe Leu
300                 20
304 <210> SEQ ID NO: 4
306 <211> LENGTH: 24
```

RAW SEQUENCE LISTING   DATE: 07/29/2004
PATENT APPLICATION: US/10/502,332   TIME: 16:05:49

Input Set : A:\PTO.FG.txt
Output Set: N:\CRF4\07292004\J502332.raw

```
308 <212> TYPE: DNA
310 <213> ORGANISM: artificial sequence
314 <220> FEATURE:
316 <223> OTHER INFORMATION: Description of Artificial sequence: primer
320 <400> SEQUENCE: 4
321 gtggcaagct acgagaacca gggt                                      24
325 <210> SEQ ID NO: 5
327 <211> LENGTH: 24
329 <212> TYPE: DNA
331 <213> ORGANISM: artificial sequence
335 <220> FEATURE:
337 <223> OTHER INFORMATION: Description of Artificial sequence: primer
341 <400> SEQUENCE: 5
342 gacgaaggag caaaggtgga agga                                      24
346 <210> SEQ ID NO: 6
348 <211> LENGTH: 22
350 <212> TYPE: DNA
352 <213> ORGANISM: artificial sequence
356 <220> FEATURE:
358 <223> OTHER INFORMATION: Description of Artificial sequence: primer
362 <400> SEQUENCE: 6
363 cccagaggca aaccctctga ag                                        22
367 <210> SEQ ID NO: 7
369 <211> LENGTH: 24
371 <212> TYPE: DNA
373 <213> ORGANISM: artificial sequence
377 <220> FEATURE:
379 <223> OTHER INFORMATION: Description of Artificial sequence: primer
383 <400> SEQUENCE: 7
384 tcgaattcgc caatgacaag acgc                                      24
388 <210> SEQ ID NO: 8
390 <211> LENGTH: 21
392 <212> TYPE: DNA
394 <213> ORGANISM: artificial sequence
398 <220> FEATURE:
400 <223> OTHER INFORMATION: Description of Artificial sequence: primer
404 <400> SEQUENCE: 8
405 ggagacttag atgtctgacc g                                         21
409 <210> SEQ ID NO: 9
411 <211> LENGTH: 21
413 <212> TYPE: DNA
415 <213> ORGANISM: artificial sequence
419 <220> FEATURE:
421 <223> OTHER INFORMATION: Description of Artificial sequence: primer
425 <400> SEQUENCE: 9
426 gacagaccag cagggacagt g                                         21
```

VERIFICATION SUMMARY　　　　　　　　　DATE: 07/29/2004
PATENT APPLICATION: **US/10/502,332**　　　TIME: 16:05:50

Input Set : **A:\PTO.FG.txt**
Output Set: **N:\CRF4\07292004\J502332.raw**

L:17 M:270 C: Current Application Number differs, Replaced Application Number
L:19 M:271 C: Current Filing Date differs, Replaced Current Filing Date